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#### **REMARKS**

#### I. Claim Status

Claims 7-11, 18, 21, and 79-80 have been cancelled without prejudice to further prosecution in one or more related continuation or divisional applications. Claims 1-6, 12-17, 19, 22-23, 26, 72-74, and 76-77 have been amended to define the claimed invention with greater particularity. Claims 81-126 have been added to further define specific embodiments of the claimed invention. Upon entry of the present Amendment, claims 1-6, 12-17, 19, 22-23, 26, 72-74, 77, and 81-126 are pending.

Claim 1 has been amended to reflect that one or more cells comprise a gene library and are grown in vitro to generate a library of gene expression products, and that the component of interest is from the one or more cell. Support for this amendment can be found in the specification at, e.g., page 3, lines 32-33, page 15, lines 20-32, page 23, lines 11-22, and page 31, lines 4-26. New claims 82 and 105 specify that the gene library encodes an enzyme library, and that the one or more component of interest is selected from the group consisting of enzyme substrate, product of an enzymatic reaction, and an enzyme. Support for these new claims can be found in the specification at, for example, page 15, lines 12-16, page 23, lines 25-32, and original claim 21. Claims 2-6 have been amended to refer to "samples" rather than "cell colonies." Support for these amendments can be found in the specification at page 36, lines 24-26 and page 37, lines 21-27. New dependent claims 83-104 and 106-126 mirror previously pending dependent claims 2-6, 12-17, 19-20, and 22-26. It is respectfully submitted that no new matter is being introduced by entry of the present amendments.

#### II. Objections

Claims 22-26 and claim 79 stand objected to for depending from rejected claims. Claim 79 has been cancelled, and is re-presented as new claims 93 and 115, which depend from new independent claims 82 and 105, respectively. Applicants believe that the arguments presented below will obviate the objections to these claims.

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### III. Rejections

# A. Maintained Rejection under 35 U.S.C. § 112, Second paragraph

Claims 1 and 18 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

The Office Action alleges that claims 1 and 18 are indefinite in view of the term "component." Claim 1 has been amended to specify that the non-column-separated components comprise a library of gene expression products, and that the screening is conducted to detect the presence of a component of interest that is from the one or more cell. New independent claims 82 and 105 specify that the non-column-separated components comprise an enzyme library, and that one or more component of interest is selected from the group consisting of enzyme substrate, product of an enzymatic reaction, and an enzyme. Claim 18 has been canceled without prejudice. Applicants believe that the term "component," as now used in the claims, is well defined and respectfully request withdrawal of this rejection.

## B. New Rejection under 35 U.S.C. § 112, First paragraph

Claim 76 stands rejected under 35 U.S.C. § 112, fist paragraph, for allegedly containing subject matter which was not described in the specification. This rejection is respectfully traversed.

Amended claim 76, and new claims 102 and 124 refer to a solid phase extraction plate. Applicants respectfully wish to direct the Examiner to the Specification at page 33, lines 26-33, which provides support for an off-line purification method comprising a solid phase extraction plate.

# C. New Rejection under 35 U.S.C. § 112, Second paragraph

Claims 3-6, 13, 21, and 76 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention. The rejections are respectfully traversed.

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- (1) Claims 3-6 stand rejected for the alleged lack of antecedent basis for the limitation "cell colonies". The term "cell colonies" has be en amended to refer to "samples" which has clear antecedent basis. Support for these amendments is provided in the specification at page 36, lines 24-26 and page 37, lines 21-27.
- (2) In regard to claim 13, the Examiner requests clarification as to how non-column separated components generated from reactions of purified enzymes and added substrates can remain within the scope of claim 1 from which claim 13 depends. Claim 13 has been amended to delete reference to added substrates.
- (3) The Office Action requests clarification in regard to claim 21, a dependant claim of claim 19 which is a dependant claim of claim 18. Claim 21 has been canceled.
- (4) The Office Action alleges that in claim 76, the metes and bounds of the term "solid phase extraction" is unclear. Claim 76 has been amended to specify that the off-line parallel purification system comprises a solid phase extraction "plate." New claims 102 and 124 also refer to a solid phase extraction "plate." Use of a solid phase extraction plate is supported by the specification at page 33, lines 26-33. It is believed that the meaning of solid phase extraction and a solid phase extraction plate are clear from the description provided in the specification.

In view of the above amendments, Applicants respectfully request withdrawal of the rejections under 35 U.SC. § 112, second paragraph.

## D. New Rejection under 35 U.S.C. § 102(e)

Claims 1, 12-20, 75, and 76 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Little et al. U.S. Patent No. 6,322,970 B1. This rejection is respectfully traversed in view of the amended and new claims.

The Little et al. patent does not describe a method of performing high throughput mass spectrometry screening that involves the steps of providing one or more cell comprising a gene

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library, and growing the one or more cell in vitro to generate a library of gene expression products as is specified in amended claim 1. Nor does the Little et al. patent describe growing the one or more cell in vitro to generate an <u>enzyme</u> library, generating product of an enzymatic reaction, and screening to detect the presence of a component of interest that is selected from the group consisting of enzyme substrate, product of an enzymatic reaction, and an enzyme, as is specified in new claims 82 and 105. Accordingly, the Little et al. patent does not anticipate the invention as claimed.

## E. New Rejection under 35 U.S.C. § 103

Claims 1-20, 72-78, and 80 stand rejected under 35 U.S.C. 103 as being allegedly unpatentable over Little et al. U.S. Patent No. 6,322,970 B1. This rejection is respectfully traversed in view of the amended and new claims.

As discussed above, and pointed out by the Examiner, the Little et al. patent does not describe several elements of the claimed invention. For example, it does not describe providing one or more cell comprising a gene library and growing the one or more cell in vitro to provide a library of gene expression products, such as enzymes. One of skill in the art would have little or no motivation to grow cells comprising a gene library to generate a library of gene expression products, such as an enzyme library, based on the Little et al. patent, which is directed to characterizing a target allele from a patient. Moreover, Little et al. provide no motivation for contacting an enzyme library with enzyme substrate, and detecting the presence of one or more component of interest selected from the group consisting of enzyme substrate, product of an enzymatic reaction, and an enzyme as claimed in independent claims 82 and 105. Absent a showing that the prior art motivates one of skill in the art to employ such elements as cell growth and expression product library, a section 103 rejection is not, in Applicants' understanding, proper.

For the above reasons, it is respectfully submitted that claims 1-6, 12-17, 19, 22-23, 26, 72, 74, 77, and 81-126 are allowable over the prior art.

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Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set forth below. The Commissioner is hereby authorized to charge any deficiency in fees or credit any overpayment to Deposit Account No. 50-0990.

March 24, 2003

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